

Recd PCT/PT 10 MAY 2005

534655

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number  
WO 2004/045076 A1

(51) International Patent Classification<sup>7</sup>: H03L 7/089,  
H03D 13/00

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(21) International Application Number:  
PCT/IB2003/004880

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(22) International Filing Date:  
3 November 2003 (03.11.2003)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
102 53 085.8 13 November 2002 (13.11.2002) DE

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:  
— with international search report

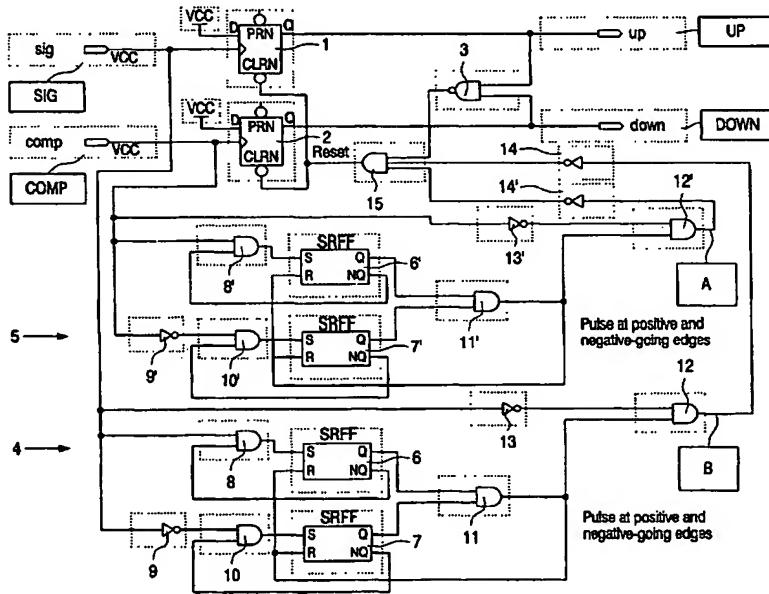
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[Continued on next page]

(54) Title: PHASE COMPARATOR



WO 2004/045076 A1

(57) Abstract: A phase comparator, particularly for a PLL circuit, compares the phase angle of input signals by evaluating the edges of the input signals and generates a regulating signal. To make the regulating signal insensitive to disruptions or interference on the input signals, an additional circuit (4, 5) is provided that evaluates further, different edges of the input signals (SIG, COMP) and generates therefrom additional reset signals for the regulating signals (UP, DOWN).



- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 03/04880

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H03L7/089 H03D13/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H03L H03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 323 692 B1 (TSINKER VADIM) 27 November 2001 (2001-11-27) column 13, line 21 – line 51 column 14, line 65 –column 19, line 34 column 21, line 21 –column 23, line 61 figures 4,8A–8E,9A–9E,10,14A–14F,15A–15F	1–5,7
X	EP 1 158 680 A (YAZAKI CORP) 28 November 2001 (2001-11-28) column 15, line 12 –column 21, line 42; figures 11–17	1,2,5,7
A	WO 02 19527 A (ERICSSON TELEFON AB L M ;FREDRIKSSON JESPER (SE)) 7 March 2002 (2002-03-07) *Whole document*	1–7

Further documents are listed in continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the International search

Date of mailing of the International search report

5 March 2004

15/03/2004

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**INTERNATIONAL SEARCH REPORT**

Internal ref.	Application No.
PCT/IB 03/04880	

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